

Clinical and pathological characteristics of breast tissues

	Normal	Carcinoma		
		Total	in situ	Grade 2 Grade 3
Pin1 Positive $\bar{x} \pm SD$	0/10† 0.114±0.106	38/51 (75%) 1.072±0.719	1/4 (25%) 0.564±0.948	17/19 (89%) 1.399±0.717
Cyclin D1	0/10	24/51 (47%)	2/4 (50%)	12/19 (63%)
HER2/neu	0/10	8/51 (16%)	0/4 (0%)	4/19 (21%)
Estrogen receptor	N.D.*	34/50†† (68%)	3/4 (75%)	11/18 (61%)
Age Median (Range)	57 (22-91)	65 (28-90)	72 (43-80)	60 (28-78)

FIGURE 2

Correlation of the Pin1 level with clinical and pathological characteristics

		Number of cases	Pin1 level ($\bar{x} \pm SD$)	P value
Normal Tumor		10	0.114 \pm 0.106	<0.0001*
		51	1.072 \pm 0.716	
Tumor Grade	Grade 2	28	0.924 \pm 0.609	0.02*
	Grade 3	19	1.399 \pm 0.717	
Cyclin D1†	Positive	24	1.364 \pm 0.715	0.01*
	Negative	27	0.824 \pm 0.631	
HER2/neu†	Positive	8	1.317 \pm 0.732	0.10
	Negative	43	1.027 \pm 0.713	
Estrogen† Receptor	Positive	34	1.011 \pm 0.718	0.32
	Negative	16	1.238 \pm 0.720	

FIGURE 3

Differentially expressed genes in Pin1-overexpressed MCF-7 cells

<Up-regulated genes>	<Down-regulated genes>
5-aminolevulinate synthase	Serine/threonine protein kinase sgk
CD97	Alpha 2 actinin
BIP/GRP78	Tu translation elongation factor (p43)
<u>PPAR-delta</u>	Platelet-activating factor acetylhydrolase Ib gamma
SR Y (sex-determining region Y)-box 22 (SOX22)	Eukaryotic translation initiation factor 4E binding protein 1
IFN-inducible gamma 2 protein	
<u>Fibronectin</u>	
Stress inducible phospho protein 1 (STIMPI1)	
Phosphoenolpyruvate carboxykinase1 (PCK1)	
<u>C-Myc</u>	
Profilin	
Unknown NO81	
EST No20-2	
<u>Cyclin D1</u>	
#genes underlined are wnt/beta-catenin/Tcf-4-target gene	

FIGURE 4

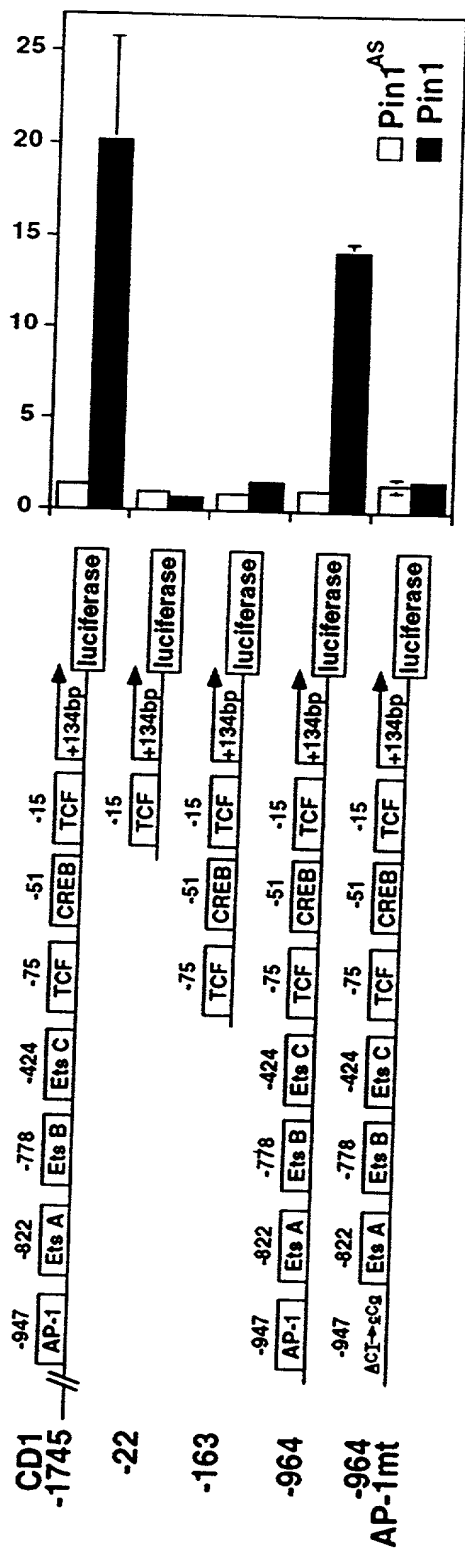


FIGURE 5

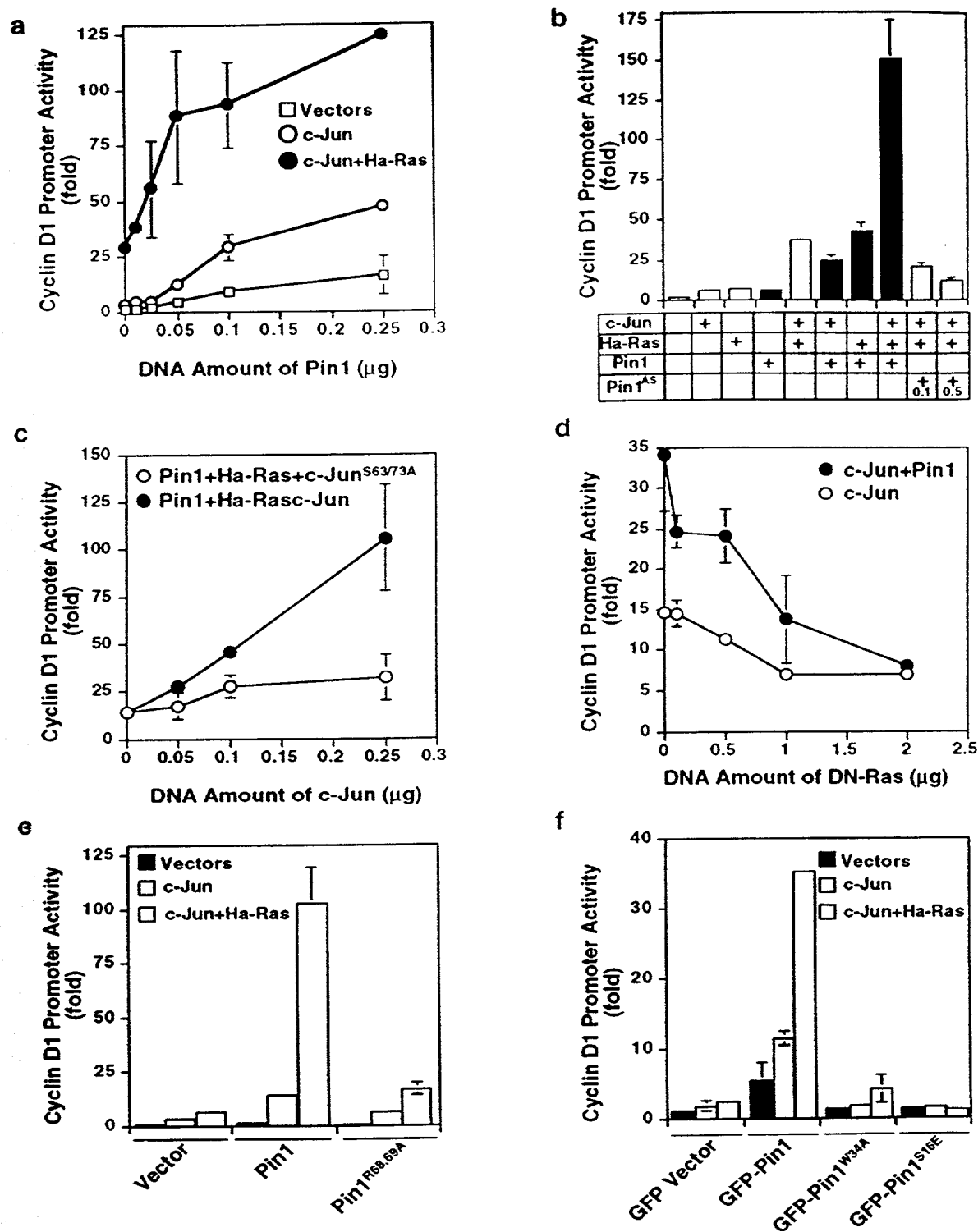


FIGURE 6

